

Claims

What is claimed is:

- 5 1. A powdering unit comprising:
  - a nozzle strip which produces a powder gas curtain containing powder particles distributed in a carrier gas stream, which powder gas curtain moves substantially in a curtain plane, wherein the powder gas curtain moves between
  - 10 two angled guiding elements each having a first guiding side arranged at least one of parallel to each other and coplanar, and each having a second guiding side running parallel to the powder gas curtain plane.
- 15 2. The powdering unit according to Claim 1, wherein the second guiding sides form an angle differing from  $90^\circ$  relative to the first guiding sides.
3. The powdering unit according to Claim 1, wherein at
- 20 least one of the second guiding sides which is remote from the first guiding side is connected to a carrying side which is perpendicular to the second guiding side and on which the nozzle strip is mounted.
- 25 4. The powdering unit according to Claim 3, wherein the end of the carrying side which is remote from the second guiding side is connected via an outer side to an end of the first guiding side which is remote from the second guiding side, and a resulting prismatic wall obtained
- 30 overall in this way is closed at the ends thereof by end parts to form a box.

5. The powdering unit according to Claim 3, wherein there is connected to the second guiding side, which does not carry a nozzle strip, a covering side which is connected, one of directly and with interposition of an outer side substantially perpendicular to the first guiding side, to that end of the first guiding side which is remote from the second guiding side, and a prismatic wall obtained overall in this way is closed at the ends thereof by end parts to form a box.
6. The powdering unit according to Claim 4, wherein the box is connected to a suction fan and the first side thereof delimits a suction slot.
7. The powdering unit according to Claim 6, wherein the suction slot is adjacent to that end of the of the first guiding side which is remote from the second guiding side.
8. The powdering unit according to Claim 5, wherein the box is connected to a suction fan and the first guiding side thereof delimits a suction slot.
9. The powdering unit according to Claim 8, wherein the suction slot is adjacent to that end of the first guiding side which is remote from the second guiding side.
10. The powdering unit according to Claim 1, wherein a substantially coplanar extension is provided for the first guiding side of at least one of the guiding elements.
11. The powdering unit according to Claim 1, wherein a lead-in sloping surface is provided at that end of the

first guiding side of at least an upstream guiding element which is remote from the second guiding side.

12. The powdering unit according to Claim 1, wherein a  
5 housing surrounds guiding elements and nozzle strip.

13. A powdering station, having two powdering units according to Claim 1, the two powdering units are arranged on opposite sides of a conveying plane for a product to be  
10 sprayed with powder.

14. The powdering station according to Claim 13, wherein the two powdering units are substantially aligned with each other as seen in a conveying direction of a product.  
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15. The powdering station according to Claim 13, wherein the first and second guiding sides of the powdering unit cooperating with a bottom side of a product to be sprayed with a powder are at a greater inclination with respect to  
20 a normal of a product-conveying plane than the second guiding side of the powdering unit cooperating with a top side of a product to be sprayed with a powder.

16. A method for operating one of a powdering unit  
25 according to Claim 1 and a powdering station according to Claim 13, wherein an air quantity drawn off via the first and second guiding elements each in the form a box is about 10 to 40 times that of a powder gas quantity delivered by the nozzle strip.

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17. The method according to Claim 16, wherein the air quantity drawn off by the guiding elements are at least partially adjustable.

18. The method according to claim 16, wherein the air  
quantity drawn off via the first and second guiding  
elements each in the form of a box is about 20 to 30 times  
5 that of a powder gas quantity delivered by the nozzle  
strip.